AMENDMENTS TO THE SPECIFICATION:

Please amend the title beginning at page 1, line 1, as follows:

TRACK OFFSET ~~COMPNESATION~~ COMPENSATION IN OPTICAL DISK ~~DRIVE~~ DRIVES USING BEAT-INDUCING SIGNALS

Please amend the paragraph beginning at page 2, line 15, as follows:

The offset factors include various types of errors. Examples are: positional deviation of the detector in the optical head[[,]]; bias of the optical beam intensity[[,]]; inclination between the optical head and the optical disk[[,]]; surface unevenness of the optical disk[[,]]; and offset in the electrical system. Thus, it is difficult to eliminate or remove all of these offset factors and to implement necessary servo-control mechanisms while considering all the factors ~~are taken into consideration~~.

Please amend the paragraph bridging pages 2 and 3, beginning at page 2, line 23, as follows:

Recently, several standards have been defined [[on]] for Digital Versatile Disks (DVDs), such as DVD-R (Recordable), DVD-R/W (Recordable/Writable), DVD+RW (ReWritable), and DVD-RAM (Random-Access Memory), in the optical disk industry. These standards have been considered as particularly promising standards for next-generation, high-density optical disks and thus, vigorous ~~researches and~~ developments have been being made on these types of optical disks.

Please amend the paragraph beginning at page 3, line 7, as follows:

Optical disks according to the above-described DVD standards have guiding grooves wobbled at a specific period. If the reflected light beam by the disk is reproduced using the so-

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called push-pull method, a "wobbling signal" having the same period as the wobbling period of the grooves is obtainable. Thus, the wobbling signal is used [[to,]] for example, to achieve the rotational synchronization of the spindle for rotating the disk and/or to generate the write clock for data writing operation. Considering this fact, a serious problem will occur if the wobbling signal is not well reproduced as desired.

Please amend the paragraph bridging pages 3 and 4, beginning at page 3, line 24, as follows:

It is known that the quality of the wobbling signal degrades largely after ~~a specific~~ data is recorded or stored on the disk. This is because light and shade spots (or, marks and spaces)[[,]] ~~which is~~ are created by the stored data[[,]] ~~affects~~ . This badly affects the quality of the wobbling signal. Therefore, it is necessary for the wobbling signal to be synchronized with the period of the wobbled grooves even after data is stored on the disk. When the disks are of the DVD+RW type, a critical problem may occur if the wobbling signal is unable to be reproduced well. This is because the buried address information cannot be read out, in other words, the ADIP signal is not reproduced well.

Please amend the paragraph bridging pages 4 and 5, beginning at page 4, line 18, as follows:

When the track offset was set at the optimum position, the wobbling signal was synchronized with the wobbling period of the grooves and at the same time, the BLER of the ADIP signal was limited to approximately 60%. However, when the track offset was shifted from the optimum position by only approximately 0.02 μm, the synchronization of the wobbling signal was unable to be achieved and the BLER of the ADIP signal was raised to

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approximately 80%. At this time, the signal-to-noise ratio (SNR) of the wobbling signal was measured in a manner according to the ECMA standards. In this case, the SNR thus measured was approximately 38dB not only when the track offset was set at the optimum position but also when the track offset was shifted from the optimum position by approximately 0.02 μm. This means that the value of the SNR changed scarcely even if the track offset varies within this range. In other words, such [[the]] a minute change of the track offset greatly affects ~~distinctly~~ the synchronization of the wobbling signal and the BLER of the ADIP signal. As a result, the track offset needs to be well controlled [[at]] with very high accuracy (i.e., the track offset needs to be optimized) even if no change is observed in the SNR of the wobbling signal due to minute deviation of the track offset.

Please amend the paragraph bridging pages 5 and 6, beginning at page 5, line 20, as follows:

Another prior-art method for compensating the track offset is disclosed in the Japanese Non-Examined Patent Publication No. 9-259455 published in 1997. In this method, the fact that the amplitude of the wobbling signal varies with the motion of the lens is utilized. ~~The track offset is compensated by the shift of the lens.~~ The shift of the lens compensates for the track offset.

Please amend the paragraph beginning at page 6, line 11, as follows:

With the above-described prior-art method for compensating the track offset with the lens shift, which is disclosed in the Publication No. 9-259455, ~~the other~~ offset factors other than the lens shift are unable to be considered. Thus, the track offset is not completely ~~compensated~~ corrected.

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